

WHAT IS CLAIMED IS:

1. A catheter structure comprising: a main tube having a proximal end and a distal end,
said main tube distal end having a lateral opening;

a distal tube having a proximal end and a distal end; and

a guide tube having a proximal end and a distal end, said guide tube having at least a
5 portion extending in said distal tube, a portion of said guide tube adjacent to said distal tube
proximal end being positioned together at a location adjacent to said main tube distal end, said
guide tube proximal end having an opening on one side of said main tube, a portion of said distal
tube adjacent to said distal tube proximal end enclosing both a portion of said main tube distal end
and a portion of said guide tube adjacent to said guide tube proximal end and said guide tube
10 proximal end extending into said lateral opening of said main tube and into said distal tube.

2. The catheter structure in accordance with claim 1, further comprising an inflatable
balloon and a lumen for a guide thread, wherein said proximal end of said guide tube and said
proximal end of said distal tube are functionally connected and disposed adjacent to one another,
said proximal end of said distal tube encloses said distal end of said main tube and said proximal
5 end of said guide tube tightly and simultaneously, and said proximal end of said distal tube is
flared in order to peripherally surround said guide tube extending into said distal end of said main
tube.

3. The catheter structure in accordance with claim 1, wherein said distal end of said main

tube has a part, which is deflected and inclined towards an inside of said main tube and said proximal end of said guide tube rests on the outside of said inclined part of said main tube.

4. The catheter structure in accordance with claim 1, wherein said proximal ends of said guide tube and said distal tube are joined to one another and to said distal end of said main tube by means of heat sealing.

5. The catheter structure in accordance with claim 1, wherein said proximal ends of said guide tube and distal tubes are beveled at said lateral opening of said guide tube.

6. The catheter structure in accordance with claim 2, wherein said guide tube extends beyond a front end of said distal tube, and said balloon is arranged between said two tubes, with a terminal neck fixed to said guide tube and another terminal neck fixed to said distal tube.

7. The catheter structure in accordance with claim 6, wherein said main tube and said distal tube together form a first lumen for sending an inflation fluid into said balloon, and said guide tube forms a second lumen for the passage of a guide thread.

8. The catheter structure in accordance with claim 1, wherein said main tube comprises tubular sections having at least one of different material compositions, different thickness and different rigidities, and said guide tube and said distal tube are formed of materials that are different from one another and different from said main tube.

9. The catheter structure in accordance with claim 1, wherein said main tube comprises tubular sections having at least one of different material compositions, different thickness and different rigidities, and said guide tube and said distal tube are formed of the same material.

10. The catheter structure in accordance with claim 1, further comprising an inflatable balloon.

11. The catheter structure in accordance with claim 10, wherein said distal tube proximal end is flared in order to peripherally reach both said distal end of said main tube and said proximal end of said guide tube.

12. The catheter structure in accordance with claim 10, wherein said guide tube portion adjacent to said guide tube proximal end and said distal tube portion adjacent to said distal tube proximal end are joined to one another and to said main tube portion adjacent to said main tube distal end by a heat seal.

13. The catheter structure in accordance with claim 10, wherein said guide tube proximal end and said distal tube proximal end are beveled at said lateral opening of said guide tube.

14. The catheter structure in accordance with claim 10, wherein said guide tube extends beyond a front end of said distal tube, and said balloon is arranged between said two tubes, with a terminal neck fixed to said guide tube and another terminal neck fixed to said distal tube.

15. The catheter structure in accordance with claim 14, wherein said main tube and said distal tube together form a first lumen for sending an inflation fluid into said balloon, and said guide tube forms a second lumen for the passage of a guide thread.

16. The catheter structure in accordance with claim 10, wherein said guide tube proximal end rests on a part of the distal end of the main tube which is deflected and inclined towards the axis of the tube itself.

17. The catheter structure in accordance with claim 16, wherein said guide tube proximal end extends along the entire length of said deflected and inclined part of the distal end of the main tube as far as the lateral opening edge of said main tube.

18. A side port assembly comprising:

a main tube having a proximal end and a distal end, said main tube distal end having a lateral opening;

5. a distal tube having a proximal end and a distal end; and a guide tube having a proximal end and a distal end, said guide tube having at least a portion extending in said distal tube, a portion of said guide tube adjacent to said distal tube proximal end being positioned together at a location adjacent to said main tube distal end, said guide tube proximal end having an opening on one side of said main tube, a portion of said distal tube adjacent to said distal tube proximal end enclosing both a portion of said main tube distal end and a portion of said guide tube adjacent to
10 said guide tube proximal end and said guide tube proximal end extending into said lateral opening

of said main tube and into said distal tube.

19. Method for manufacturing a catheter structure in accordance with claim 1, comprising the steps of:

providing a main tube with a proximal end and a distal end; providing a guide tube with a proximal end and a distal end;

5 providing a distal tube with a proximal end and a distal end; providing a lateral opening on said main tube;

extending said proximal end of said guide tube into said lateral opening;

enclosing said distal end of said main tube and said proximal end of said guide tube into said proximal end of said distal tube.

20. Method in accordance with claim 19, wherein it further comprises the step of fixing said distal end of said main tube, said proximal end of said guide tube and said proximal end of said distal tube to one another by means of a heat-sealing operation.

21. Method in accordance with claim 20 wherein before the step of fixing said distal end of said main tube, said proximal end of said guide tube and said proximal end of said distal tube to one another by means of a heat-sealing operation, it further comprises the step of inserting two expanders into said distal end of said main tube and into said proximal end of said guide tube.

22. Method in accordance with claim 21, wherein it further comprises the step of

extracting said expanders.